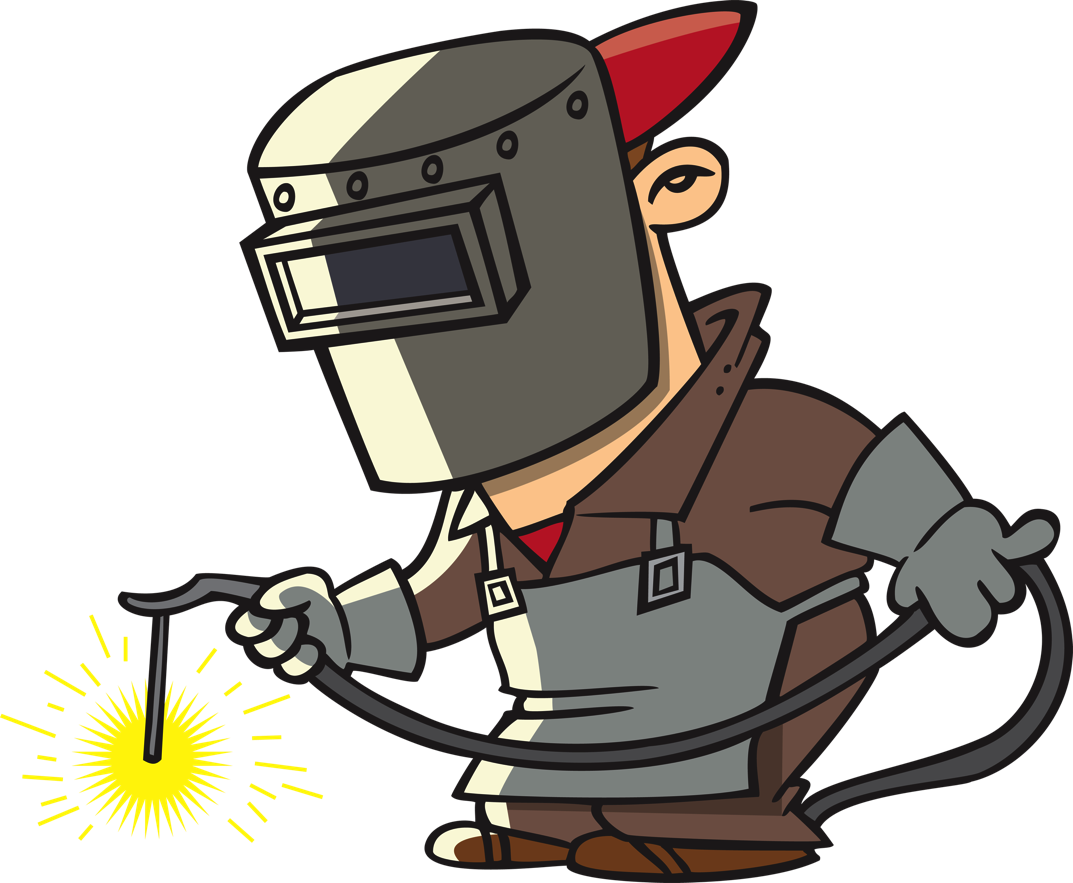
There are several hazards with welding.



* Burns from heat
* Eye damage
* Heavy metal crushing fingers, toes, etc.
* Electrical, fire, explosive hazards
* Inhalation of fumes, dust, & metals

Heat is not the most dangerous hazard, but it is the most likely cause of injury to you. It is also the easiest to avoid. Use heavy leather gloves whenever you are dealing with welding materials (and check them for holes).

You are required to wear safety glasses in the shop at all times. *This includes while welding.* There will be sparks flying, slag being hammered, and who knows what else that poses a risk to your eyes. IN ADDITION, all welding generates UV (ultra violet) and IR (infrared) radiation that is dangerous to your eyes—like looking at the sun. We will take the following precautions in the shop when welding 1) lower the curtain to protect others and 2) always have a welding helmet on when welding. Know how to properly adjust the helmets and goggles to your head—EVERY TIME you use them.

* Gas welding: use shade 5 and the welding green/red/tan safety goggles
* Arc/MIG welding: use shade 10-12 welding helmet. You can adjust the auto-shading helmets—make sure they are correctly adjusted to your head
* TIG welding: use shade 12-15 on the welding helmet.

Clothing that won’t catch on fire or melt to your skin! This means DO NOT WEAR polyester workout suits, running shoes, sandals, shorts or short sleeve shirts. Also, tie up your hair, wear welding jackets, gauntlet gloves, and leather aprons as needed (which is most of the time).

Welding fumes are a complex mixture of metallic oxides, silicates and fluorides. Fumes are formed when a metal is heated above its boiling point and its vapors condense into very fine, particles (solid particulates). So, get in the habit of turning on the welding ventilation system—this takes some time, so be patient. Grinding can also generate hazardous particles—so you may want to wear a respirator/face mask.